



Partnership Opportunities for Rural Broadband Deployments

SRC Issue Brief

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INTRODUCTION

The rural broadband industry faces a generational moment of opportunity as national attention focuses on expanding network deployments.¹ The COVID-19 pandemic increased and accelerated interest in broadband with particular attention to rural areas. Dramatic growth in remote learning, telework, and telehealth encouraged legislative action to increase broadband availability and adoption in rural and Tribal regions. Several COVID-19 relief measures included funding dedicated to, or otherwise eligible, for broadband development. Most notably, the 2021 Infrastructure Investment and Jobs Act (IIJA) includes \$42.5 billion for the Broadband Equity, Access, and Deployment (BEAD) Program. BEAD has several key elements, including priorities for scalable networks and funding priorities for unserved areas. The program is intended to complement existing Universal Service Fund programs that are administered by the Federal Communications Commission. Overall, Congress has appropriated more than \$60 billion for programs that will affect the broadband industry just through the IIJA, on top of prior appropriations that included funds that many states have elected to use to stimulate broadband deployment. As efforts commence to deliver broadband to unserved and underserved areas, rural broadband providers are poised to play an important role not only in their incumbent service areas but also as catalysts to assist others, including local governments and rural electric providers, in their drive to address needs in areas historically served by other firms but still lacking access to quality broadband.

OVERVIEW

Many recommendations presented in this brief will be familiar to rural broadband providers

since the analyses correspond to activities in which many are already engaged. The goal of this issue brief is to provide rural broadband providers and prospective partners a framework for assessing and analyzing partnership opportunities. Accordingly, readers are encouraged to borrow from it freely and to adapt its recommendations to their specific local needs. A popular aphorism observes, “If you have seen one rural place, you have seen one rural place.” This Issue Brief recognizes the diversity among rural spaces and the consequent need for a diversity of solutions for rural broadband providers and the rural electric cooperatives (RECs), municipalities, or other organizations with whom they may partner. Appendices to this report include common questions that rural telecom providers and parties interested in broadband deployment may explore when considering joint ventures. In the discussion below, rural broadband providers like those within NTCA’s membership will be referred to by their common designation as RLECs (Rural Local Exchange Carriers).

Broadband providers and their prospective partners may identify any number of approaches to help frame their discussions. One framework is the “4D” approach: Differentiate; Define, Develop; Deploy.

DIFFERENTIATE

The anticipated influx of Federal funding through BEAD and other programs introduces the probability of many new market entrants. This is not unexpected and prior Federally administered programs have similarly attracted new-to-market players who aver an interest in providing broadband to unserved areas. As can be expected, however, the track record of these entities in

¹ Smart Rural CommunitySM acknowledges its program sponsors CALIX; NISC; NRTC; and VertiGIS.

technical, managerial, and financial matters may not always be suited to the demands of the program. This Issue Brief does not suggest a template for evaluating the capabilities of potential partners. Rather, it suggests that RLECs with experience in deploying, maintaining, and operating broadband networks have a solid foundation that differentiates them from other potential providers—and it is incumbent upon RLECs to share how this track record distinguishes them from other firms.

Appendix A shares the Smart Rural Community Showcase award application. This application provides a framework for RLECs to “tell their story” to third parties, which in the context of funding applications may include local or state government or other parties. Customer testimonials and quantified information can contribute greatly by both personalizing the importance of broadband while at the same time demonstrating its aggregate and measurable impact. Rural providers may be reticent and reluctant to broadcast or “boast upon” their work. However, sharing accomplishments in the partnerships context is aimed ultimately at ensuring robust broadband service for unserved communities, provided by firms with demonstrated commitment and expertise in serving rural spaces. Rural broadband providers can and should be objectively forthright about their abilities to play reliable roles in meeting National public policy imperatives, demonstrating how these abilities differentiate RLECs from others in the broadband ecosystem.

DEFINE

Numerous RLECs who have pursued collaborative broadband undertakings were interviewed as this Issue Brief was developed. A recurring theme in those conversations was the critical role that relationships play in laying the foundation for a successful venture. More so than standard vendor or contractor relationships, the element of personal trust emerged as a basis of successful joint ventures. In fact, parties who shared information about ventures that did *not* succeed frequently reflected that a requisite level of trust between the parties was absent. While this does not preclude the possibility of ventures stalling due to external or exogenous conditions, a sense of trust among the parties was nearly always identified as a core value in moving toward next steps in the process.

Defining roles is an important part of building such trust. The relationship may be defined as familiarly as any personal relationship: What do the parties want to get out of this venture? What does each party “bring to the table”? What are the respective strengths and weaknesses of each party, and how will the venture play to those strengths? What role will each party play in the venture? What mechanisms will govern if problems or disagreements arise? Appendix B offers questions that non-telecom providers may consider in consultation with incumbent broadband providers as the respective roles of each partner are explored and defined.

DEVELOP

Service Area

Several aspects of a proposed venture can be identified as the parties consider joint and respective responsibilities and develop the terms of their working relationship and project proposals. In the first instance, the scope of the service area will dictate many aspects of the relationship agreements. This includes identifying areas in which broadband is not yet deployed, and the demand for broadband in those areas. These may contemplate sub-county areas, *i.e.*, individual townships or villages, if working with an entire county is not feasible. A rural broadband provider’s ability to conduct this type of mapping will depend, variously, on public broadband maps (Federal, state, or other) and whether the provider or its prospective partner(s) have staff or financial resources to conduct their own surveys. Local governments or other organizations that are interested in obtaining broadband may have sufficient incentives to assist these efforts either individually or in partnership with themselves or with the RLEC. Appendix B offers questions that RLECs and prospective partners may explore as they develop business plans and discuss anticipated costs to deploy and deliver service.

Market Surveys

Once the presence or absence of broadband is established, a next step in developing project proposals is to evaluate end-user interest and market demand for the service in that area. The growing use of broadband in agriculture, economic development, education, health care, and other sectors offers a framework for evaluating community interest in broadband, and surveys can include not only potential residential end-users but business and enterprise users, as well (reports focusing on the intersection of rural

broadband and various industry sectors can be accessed at www.smartruralcommunity.org). These types of surveys can be conducted to not only assess general interest, but to also incorporate information that illustrates how users would be able to take most advantage of the service. Stated differently, prospective users who have not experienced telehealth or distance education engagements may benefit from illustrations of those applications. In this approach, a survey would not stop at asking prospective users whether they would subscribe and the rates that they would pay, but would rather provide examples of telehealth, telework, or other applications and assess consumer interest in those services. In a similar vein, surveys that include potential business applications may enlighten prospective

Pineland Telephone Co-op (Metter, GA) State-administered American Rescue Plan Act (ARPA) funding required partnerships with not-for-profits or local governments. Pineland worked with Jenkins County, which was committed to the company's involvement with the program. Although Pineland is a cooperative, the partnership with the County was structured as a for-profit enterprise. The initiative was expanded to include **Planters Telephone Cooperative** (Newington, GA), a local rural broadband provider that had existing assets in the community. The two rural providers identified service areas on the northern and southern sides of a river that runs through the county. The tri-lateral effort combined existing assets from the two companies with new facilities that rely upon ARPA funding to bring broadband to previously unserved areas. The build was featured in local media in part because the services were heralded as a significant new opportunity for parts of the county that face persistent poverty. The overall structure provides that the County will use ARPA funding to build the new network, after which each company will assume ownership and operational liabilities for the portions of the network on their respective side of the river.

enterprise users to possibilities they had not considered previously. This can include specific outreach to local business or commercial sectors including agriculture, schools, hospitals, local businesses, community organizations, industrial and manufacturing centers, and local and state government representatives. Utilizing the surveys as both an investigative tool by the provider as

well as an educational tool for the consumer may predict take-rates with greater accuracy.

From the consumer perspective, one high-definition movie consumes as much bandwidth

Chariton Valley Telephone (Macon, MO) and **Green Hills Communications** (Breckenridge, MO) established a strategic agreement to deploy fiber across a bridge that crosses 3,000 feet of the Missouri River. In addition to reaching new service territories, the effort also paves the way to establish facilities into larger metro areas. This project requires not only coordination among the companies but also among state and Federal officials, including the Army Corps of Engineers and the Department of Homeland Security. The arrangement provides a model for similarly situated companies to join assets and experience to deploy to unserved areas.

as 35,000 web pages. Consumption demand is expected only to increase as new applications are developed, as more common household appliances become “smart” and “connected” and as more households increasingly use multiple devices simultaneously. Online calculators can illustrate how common residential broadband applications implicate household capacity needs.

Finally, these investigations can incorporate demographic data that can assist a municipality as it addresses factors such as age, household income, or other factors to assesses how promotion of broadband for education, healthcare or other applications may have specific relevance to various demographic sectors. (For additional information, please see “Rural Imperatives in Broadband Adoption and Digital Inclusion,” which can be accessed online at www.smartruralcommunity.org.)

Branding

Surveys can also inform marketing strategies. For example, in a hypothetical situation involving an RLEC and an REC, does one party enjoy a stronger corporate identity and existing connection to the community? Does an incumbent REC convey an existing connection to the community where a partnering RLEC might be a new entrant? In contrast, does the neighboring RLEC brand convey an image of broadband expertise? Would a standalone, original name for the combined broadband offering provide an opportunity to convey impressions that the REC and RLEC identities

alone do not provide? What considerations may be at play where a partnership among an RLEC and local government or newly formed entity emerges?

DEPLOY

The operational business structure of the venture can take different forms to reflect the respective strengths and skill sets of each partner. The municipality or REC and the RLEC each bring value-added attributes to the project that can be leveraged in deployment and operation of a project once a partnership is realized. Although certain of these skills could be acquired and/or executed by the other, in most instances efficiencies will be increased by relying on existing expertise. Municipalities may be able to navigate certain permitting, easement and other issues that affect construction; these might also include obtaining access to government property for the installation of wireless facilities. Municipalities might also possess goodwill within the community, which could also encourage subscription to new services if the municipality is viewed as a trusted partner or purveyor. RECs possess unique knowledge of local conditions and can leverage existing relationships with their customers to good advantage of a partnership.

The RLEC has the potential to provide crucial insight into broadband-specific issues, serving as a counselor to provide contextual information that informs the partner's decision. The RLEC can also provide critical insight into legal requirements that may attend the deployment and operation of a communications infrastructure, including local public utility or Federal regulations that may govern issues as disparate as access to 911 emergency services to periodic reporting obligations that might be required under applicable laws. The RLEC might also be able negotiate favorable terms for the purchasing and installation of vital network components based upon its experience or volume dealings. Finally, the RLEC can incorporate experience from its incumbent territory and demonstrate how it can create social connections in the community that encourage participation and adoption among prospective subscribers.

Joint ventures can contemplate many different arrangements, including: a partnership in which the parties assume shared roles in all aspects of the venture; the RLEC managing network operation while the partner manages consumer-facing elements; the RLEC managing all

operational aspects of service delivery including customer service, accounts management, and tech support, while the partner "white labels" the service; provision or sharing of trucks and heavy equipment; or the RLEC acting as consultant at any or all stages of design, deployment, and operation.

Rainbow Communications (Everest, Kan.) About ten years ago, a Tribe near the northeast border applied for an American Recovery and Reinvestment Act (ARRA) grant to deploy FTTH. At the time, the Tribe, which consisted of fewer than 100 members, a healthcare facility, a casino, and other businesses, was served by a combination of a fixed wireless carrier and a Tier 1 line. The Tribe initially filed for the grant with the intention of proceeding as a stand-alone, self-sufficient broadband provider. As the process proceeded, however, the Tribe determined that partnering with Rainbow, whose network reaches the edge of the Tribal territory, would provide greater operational efficiencies. However, since the Tribe was committed to retaining ownership of the network as a sovereign nation, the parties executed a management agreement whereby Rainbow operates the network. Since that initial venture, Rainbow and the Tribe have applied for additional grants including resources to support "smart farming" as well as to extend broadband coverage to new housing. Rainbow and the Tribe are also actively looking into other joint ventures for economic development and telecom training schools.

CONCLUSION

This Issue Brief is intended to provide an analytical construct for rural broadband providers and other parties considering partnerships to deploy broadband to unserved areas. As illustrated by the various case studies, there is no "one size fits all" solution. Rather, each effort will be guided by the particular contours of individual communities and entities. However, after mapping and identifying potential service areas, parties are encouraged to recognize the importance of alacrity, if not urgency, in investigating these opportunities. Close coordination with other industry sectors, including ag, economic development, education, healthcare, and others will enable contextual development of local network needs and enable a more focused and studied analysis and proposal.

The above-mentioned Smart Rural Community reports and other resources offer background information on industry sectors that rely on

broadband. The focused direction of these collective resources should facilitate effective collaborative efforts. ☺

Hardy Communications (Lost City, WV) All surrounding counties in the state have asked Hardy to deploy broadband to unserved areas. Hampshire County had a staff member dedicated to mapping and who could determine the specific contours of the proposed service areas. Hampshire County also had access to state funding and effectively "owned" the project, while Hardy led the actual deployment and operation of the network. Several additional projects have been undertaken by Hardy and Hampshire County, governed by addendums to the original Memorandum of Agreement. The arrangements of ownership and operation, however, vary project-by-project. In some instances, the County owns the fiber while Hardy provides the service with the option to purchase the infrastructure in the future. In others, Hardy owns and operates the facility; in other instances, the County pays Hardy to execute the project, but may contribute staff hours to assist with mapping or other requirements. Hardy and County staff meet regularly, combining each party's expertise in mapping and Federal programs.

The following are representative outtakes from interviews with rural broadband providers as this Issue Brief was prepared.

Many townships take a different approach. Some townships want to serve the whole county; others want to focus only on the township. It's best to start at the township level. It's usually easier to work with township officials, and there is the added benefit that township officials are motivated to serve the entire township because ultimately they will face reelection. And even if they need to contribute township resources before Federal funds come in, that's OK. Because while no one likes more taxes, Federal funding combined with local resources will get service there and make it more affordable. And that is a feather in the cap for the town chairman.

The big companies that are incumbents in the areas sometimes oppose these projects. And sometimes the CLECs oppose them, too. But sometimes those companies are simply shutting down their copper plant, and even if they object at the initial stage, it has been our experience that they don't file opposing comments once the debate gets into the public record. And we have had customers at town council meetings explain that larger incumbents effectively said, "We don't have plans for this area." But here comes a small rural provider and they're ready to serve"

Take a look to see which townships you touch – and then determine where it makes sense to serve. But don't pursue the areas that are touched by another rural telco.

Hurdles? Lack of funding in the township. Sometimes they faced other expenses, roads to fix or other maintenance. And sometimes it's difficult to make that pitch that broadband should rank higher than paving a road. But it helps to get some people to show up at a township meeting. That helps a lot. When faced with a choice, sometimes they want the broadband more than the road.

Survey the township residents and share those results with the township. That's what got them to the town hall meeting, they wanted to hear the voices of the community. And the speeds we could deliver compared to what they were receiving, it was a love affair. We got them to the meeting. And then the Federal grants come in, and the broadband gets built, and they will probably enjoy reelection for years to come because they had the vision to get this built.

The agreements were executed pretty quickly. Mutual trust among the principals played a major role in crafting the project. And a lot of these relationships are built as people from the different companies work together on various community committees. In a small town, that's not unusual. So, the school board or local chamber is great place to get to know someone, and then find a way to discuss what types of bigger projects you can work on together.

APPENDIX A

SMART RURAL COMMUNITY SHOWCASE APPLICATION

The Smart Rural CommunitySM (SRC) Showcase award has offered industry-leaders an opportunity to differentiate themselves since its inception in 2013. This competitive award program is aimed at encouraging rural broadband providers to share best practices in order to (a) encourage peer providers to pursue similar efforts and (b) demonstrate to policymakers and other leaders the follow-on and far-reaching impact of rural broadband investment. These applications are reviewed by a broad panel representing rural broadband providers, technology and management consulting firms, healthcare, education, libraries, agriculture, economic development, and other sectors. The questions shared below are drawn from a recent version of the Showcase award application. These questions are intended to encourage rural broadband providers to share their accomplishments from the perspective of community users who benefit from the services.

ACHIEVEMENT

Please describe the technology platforms deployed in your network; the capabilities offered to residential and business customers; and take rates for broadband service. Please describe challenges your company faced deploying its advanced broadband network. Please share whether you offer a standalone broadband service. Please describe any special conditions or local needs the company addressed in pursuing increased adoption rates, including steps undertaken specifically in regard to the COVID-19 pandemic and the period following.

IMPACT

Please describe the difference that broadband has made in your community. Where appropriate or possible, please quantify these impacts on other industries, including, by way of example: agriculture, economic development, education, government services, health care and/or public safety. Please share anecdotal case studies. Please explain how the company presents itself to the community, i.e., as a solutions provider, as opposed to a service provider, and share examples in support of these statements. Please consider the impact your company has had not only on your local community, but on regional efforts, as well.

COLLABORATION

Please describe how the company worked with and collaborated with other local leaders. These efforts may include, but need not be limited to, the development and deployment of innovative broadband-enabled solutions; community building efforts; leadership and training; and programming for youth, the elderly, and underserved. These accounts may include strategic efforts undertaken at a broad, community-overview level as well as the development of company-led efforts to implement targeted technical solutions.

IN THEIR OWN WORDS

Please use this section to provide customer testimonials and reflections upon the difference that broadband has made in your customers' engagement with school, work, healthcare, and other applications. These may be presented as letters, video, or other formats. Please include no fewer than three letters of recommendation from community members or leaders.

APPENDIX B

VISION AND ROLE OF MUNICIPAL PARTNER

Municipal government partners may face regulatory restrictions on their ability to provide retail broadband service. Moreover, even in the absence of legal barriers, political realities may inform a municipality's decision to enter the retail broadband internet access services business. Without presuming a specific outcome, the following questions can be presented as a starting point for discussions among RLECs and municipalities. These questions, as well, can be adjusted to apply to RECs and internal by-laws or other standards that may affect REC entry into the market.

- Is the municipality interested in a network that will service only government facilities or schools, or is the municipality interested in providing service to residential and commercial end-user (residential and business) locations?
- Is the municipality exploring a public wireless network that would serve a discrete segment of the city (*i.e.*, a downtown Wi-Fi network)?
- Is a co-owned or co-operated network that features shared risk preferable, *i.e.*, a network that is owned and operated by the municipality, but which relies upon a rural broadband provider for installation, maintenance, and Internet connectivity?
- What is the current financial state of the municipality? Can it afford to invest? How will costs and liabilities be allocated among the municipality and other parties? Are matching fund requirements, if applicable, manageable?
- What financing plans does the municipality consider? Is there existing municipal capital? Will public bonds be sold? Will private capital be obtained? Will state or Federal funding be accessed?
- Will the facility rely upon existing infrastructure?
- Will network operation rely upon acceptable levels of financial loss or cross-subsidization among other municipal services?
- Can the municipality survive the investment cycle of the network, including initial recovery of costs, ongoing maintenance, and future upgrades?
- How does the municipality plan to address operation functions and costs, including staff necessary to coordinate fiber repairs or other network maintenance; management of the access network; maintenance of network security; administration of ISP functions such as DNS and DHCP; end-user technical support; and marketing?

APPENDIX C

GEOGRAPHIC SURVEY

In addition to identifying the potential service territory and market demand in that region, prospective partners are encouraged to investigate the following issues that can implicate the extensive costs and intricate engineering and design elements that are an integral part of network deployment. For municipalities, particularly those who are not familiar with telecom or utility engineering design, these questions can illuminate the challenges of rural broadband deployment and the value of partnering with an incumbent rural broadband provider. RLECs are uniquely suited to explain how the following affect the costs of deploying and operating a network:

- Population density of customers to be served by the facility.
- Distribution of facilities across the network, including buried and aerial.
- Environmental or historic factors affecting the siting of facilities or components.
- Local, state, or Federal parkland or other sites.
- Soil conditions and terrain.
- Existing utilities and facilities.
- Rights of way.
- Weather patterns affecting construction schedules.
- Work locations.
- Ability to obtain contractors and other construction personnel.
- Prevailing labor rates for construction and operation and relative cost-of-living indices.

About NTCA—The Rural Broadband Association:

NTCA—The Rural Broadband Association represents approximately 850 independent, community-based telecommunications companies that lead innovation in rural America. NTCA advocates on behalf of its members; provides training and development; produces publications and industry events; and offers an array of employee benefit programs. In an era of exploding technology, deregulation, and marketplace competition, NTCA's members are leading the IP evolution for rural consumers, delivering technologies that make rural communities vibrant places in which to live and do business. Because of their efforts, rural America is fertile ground for innovation in agriculture, economic development, education, health care, public safety, and other services. Visit us at www.ntca.org.

About Smart Rural Community:

Smart Rural CommunitySM is an initiative of NTCA—The Rural Broadband Association, promoting rural broadband networks and applications to foster innovative agricultural, economic development, education, health care, other vital services. Smart Rural Community administers award, best practices, and educational programming. For more information, please visit www.smartruralcommunity.org.



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